DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027670
Date Inspected: 07-May-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Lubrite Industries

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Meadville PA

CWI Name:	Brad McWright				**CWI Present:**	☑	**Yes**	☐	**No**		
Inspected CWI report:	☐	**Yes**	☐	**No**	☑ **N/A**	**Rod Oven in Use:**	☐	**Yes**	☐	**No**	☑ **N/A**
Electrode to specification:	☐	**Yes**	☐	**No**	☑ **N/A**	**Weld Procedures Followed:**	☑	**Yes**	☐	**No**	☐ **N/A**
Qualified Welders:	☑	**Yes**	☐	**No**	☐ **N/A**	**Verified Joint Fit-up:**	☑	**Yes**	☐	**No**	☐ **N/A**
Approved Drawings:	☑	**Yes**	☐	**No**	☐ **N/A**	**Approved WPS:**	☑	**Yes**	☐	**No**	☐ **N/A**
						Delayed / Cancelled:	☐	**Yes**	☐	**No**	☑ **N/A**

Bridge No: 34-0006
Component: Spherical Bushing Hinge K

Summary of Items Observed:

This Quality Assurance Inspector (QAI) arrived at Lubrite Industries (LI), Meadville PA, as requested to monitor the welding of the Anchor Studs to the Anchor Plates for Bearing Assemblies HK1 and HK2.
Upon arrival this QAI met with Third Party QC Reno Davis KTA (TPQC), and Brad McWright (LIQC). First Anchor Plate was set up and locations marked for attachment of anchor studs to plate. The plate material is ASTM A709 Grade 50 Heat 0502434. Anchor studs are 1" x 8 ¼" ASTM A108/A29 Grade 1015 Heat 5093721.
Qualified LI Welder then proceeded to weld (8) Anchor studs to Plate with no failure of new gun. Welds were inspected by TPQC and witnessed by this QAI. Visual inspection revealed no surface defects. The TPQC requested a bend test be performed on one stud for verification of full fusion. Stud was bent 15 degrees with no sign of tearing from base metal.
Anchor Plate HK1-A2 was in process of welding studs to plate when the stud gun misfired causing damage to base of stud and base metal. The stud broke off revealing a crater in the base metal approx. .108" deep x 1.125" long and .375" wide. This defect will need to be weld repaired before attempting another stud weld in this location. It was found that when the new welding equipment was installed the Maintenance mechanic did not tighten one of the main power lines and it burned up the connection unit.
Anchor plates completed with stud welding on this Date are HK2-A1, HK2-A2, HK2-A3, HK2-A4, HK2-A5, HK2-A6, HK2-A8 and HK1-A8.

The items observed appear in general conformance with the contract documents and approved drawings with the exception noted above to be repaired at a later date.

Summary of Conversations:

WELDING INSPECTION REPORT

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Basic conversation, fundamental to completion of the tasks at hand, occurred between this QAI and LI QC Personnel.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Aaron Prchlik (510)-610-9822, who represents the Office of Structural Materials for your project.

Inspected By:	Sullivan,Kevin	Quality Assurance Inspector
Reviewed By:	Foerder,Mike	QA Reviewer